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Alistair K. Chan  
FOLEY & LARDNER  
Firstar Center  
777 East Wisconsin Avenue  
Milwaukee, WI 53202-5367

EXAMINER

ALBERTALLI, BRIAN LOUIS

ART UNIT

PAPER NUMBER

2626

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/748,660

Applicant(s)

ROWLANDSON ET AL.

Examiner

Brian L. Albertalli

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 8-14 and 16-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-14 and 16-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 10, 18, 26, 30, 36 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 5, 8, 10, 11, 13, 14, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Carbonell et al. (U.S. Patent 5,995,920).

In regard to claim 1, Carbonell et al. disclose a method of organizing a statement library (Fig. 5, a constrained source language, CSL, is made up of a plurality of lexical items, with each lexical item representing a word, phrase, or quoted term, column 17, lines 3-35, and column 18, lines 8-13; furthermore, the LE domain model 530 contains synonyms for the lexical items, column 17, lines 21-26; each lexical item and synonym, therefore, is equivalent to the claimed "statement" and the Domain Model in Fig. 5 is equivalent to the claimed "statement library"), the method comprising:

associating a first plurality of statements from the statement library together as a group of statements (lexical items are grouped together as concepts, column 16, lines 50-67, column 17, lines 53-54 and column 18, lines 8-13);

associating each statement from a second plurality of statements from the statement library with a plurality of statement attributes including a statement attribute that denotes a grammatical characteristic of speech (each lexical item is associated with a part of speech, i.e. verb, adjective, etc., column 17, line 51 and column 18, lines 13-19);

associating at least one keyword with the group of statements (each concept grouping is denoted by a concept name, column 18, lines 8-13);

associating each statement from a third plurality of statements from the statement library with at least one other statement from the statement library (the LE domain model 530 associates non-CSL synonyms to CSL lexical items in the Kernel domain model 510, column 17, lines 21-26 and column 18, lines 32-44).

In regard to claim 2, Carbonell et al. disclose providing a fourth plurality of statements from the statement library that include a data entry field which allows a user to enter data into the statement (during document creation, when CSL lexical items are substituted as synonyms for non-CSL items, the CSL lexical items may be modified, column 9, lines 50-57).

In regard to claim 4, Carbonell et al. disclose providing reference information in a fourth plurality of statements from the statement library (both the Kernel domain model lexical items and the LE domain model synonyms contain reference information such as usage examples, column 17, lines 58-61 and column 18, lines 38-44).

In regard to claim 5, Carbonell et al. disclose providing a hyperlink in a fourth plurality of statements from the statement library (lexical items are linked to form an ontological knowledge base, column 15, line 54 to column 16, line 5).

In regard to claim 8, Carbonell et al. disclose associating an acronym with a fourth plurality of statements from the statement library (the vocabulary used in the CSL, which makes up the domain model of Fig. 5 includes acronyms, column 13, lines 37-41).

In regard to claim 10, Carbonell et al. disclose a method comprising:  
accessing a group of statements using a keyword which is associated with the group of statements (Fig. 7, during document creation, a term is checked against the CSL, column 20, lines 10-13; if the word is a non-CSL term, a group of valid CSL lexical items are retrieved, column 20, lines 21-26; the non-CSL term, therefore, is a “keyword” which “accesses” a group of statements); and

selecting a statement from the group of statements (the user selects one of the valid CSL lexical items, column 20, lines 23-26);

wherein the statement includes a data entry field which allows a user to enter data into the statement (the user may modify the selected valid CSL alternative, column 9, lines 50-57).

In regard to claim 11, Carbonell et al. disclose accessing another grouping of statements which is nested within the group of statements (spelling alternatives are presented, column 21, lines 34-39).

In regard to claim 13, Carbonell et al. disclose accessing reference information associated with the statement (both the Kernel domain model lexical items and the LE domain model synonyms contain reference information such as usage examples, column 17, lines 58-61 and column 18, lines 38-44).

In regard to claim 14, Carbonell et al. disclose accessing a hyperlink associated with a statement (lexical items are linked to form an ontological knowledge base, column 15, line 54 to column 16, line 5).

In regard to claim 16, Carbonell et al. disclose receiving data in the data entry field (the user modifies the selected valid CSL alternative, column 9, lines 50-57).

In regard to claim 17, Carbonell et al. disclose each of the plurality of statements is associated with abbreviated text which is separate from the statement acronym (the vocabulary used in the CSL, which makes up the domain model of Fig. 5 includes abbreviations, column 14, lines 24-28).

4. Claims 36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Anick et al. (U.S. Patent 5,175,814).

In regard to claim 36, Anick et al. disclose a method of searching a database comprising:

accessing a group of statements using a keyword which is associated with the group of statements (Fig. 6, phrases, synonyms, related terms, and compound terms associated with a particular keyword of a selected tile are accessed and displayed for the user, column 10, lines 7-43); and

providing a listing of reports associated with the statements from the group of statements (the user selects associated statements from the group of statements to add to a database query, column 11, line 30 to column 12, line 12; as can be seen in Figs. 2-13, the submitted query returns a set of query matches from which a listing of the titles can be displayed for the user).

In regard to claim 37, Anick et al. disclose accessing another group of statements which is nested within the group of statements (Fig. 6, compound terms window 640 allows the user to select a portion of the term (keyword) in entry area 650 to retrieve and display compound terms associated with the portion term, column 10, line 62 to column 11, line 9).

In regard to claim 38 Anick et al. disclose selecting a statement from the group of statements (the user selects associated statements from the group of statements to add to a database query, column 11, line 30 to column 12, line 12).

Claims 26-35 are rejected under 35 U.S.C. 102(b) as being anticipated by McIlroy et al. (U.S. Patent 5,583,758).

In regard to claim 26, McIlroy et al. disclose a method of generating a clinical report through a computer user interface, comprising:

selecting a first medical statement from a medical statement library stored in a computer readable database (guidelines lead a user through a series of clinical data collection queries, column 5, lines 7-20; the answers to the queries are "medical statements" based on the patient's examination, see Fig. 14, column 10, lines 30-32, and column 12, lines 3-24);

providing the user access to a plurality of filtered medical statements which are filtered from the medical statement library (the user's answer to a query, i.e. the first selected medical statement, determines the next question that will be presented, and thus the next set of answers, Fig. 14, column 12, lines 25-48) using at least one of a grammatical characteristic of the first medical statement, a keyword associated with the first medical statement (some questions require only a yes or no answer, i.e. keywords associated with the first answer that determine the next question and corresponding set of answers, see Fig. 18 and column 12, lines 6-11), an acronym associated with the first medical statement, or an identifier associated with a group of medical statements; and



selecting a second medical statement from the plurality of filtered medical statements (the process is repeated until a treatment option is determined, column 12, lines 36-48).

In regard to claim 27, McIlroy et al. disclose completing automatically a partial identifier entered by a user (Fig. 12b, a partial string is entered, column 11, lines 35-41).

In regard to claim 28, McIlroy et al. disclose providing access to the complete statement library upon request by a user and thereby replacing the plurality of filtered medical statements (in a non-directive mode all answers, i.e. "medical statements" can be accessed, column 16, lines 37-49).

In regard to claim 29, McIlroy et al. disclose providing the user access to a further filtered list of medical statements derived from the plurality of filtered medical statements based upon an identifier associated with a group of medical statements which is provided by the user (see Fig. 14, the user's first answer to question 1, i.e. selection of a first "medical statement", provides a plurality of filtered medical statements, i.e. the answers to question 2; upon selection of an identifier associated with a group of medical statements, i.e. (a), (b), (c), or (d) associated with answers to question 2, a further filtered plurality of medical statements are presented to the user, i.e. answers to questions 3 and 4, column 12, lines 3-35).

In regard to claim 30, McIlroy et al. disclose a method of making a clinical assessment, comprising:

generating a plurality of medical statements from a statement library (Fig. 1, guideline databases 330) stored in a computer readable database based on clinical measurements (guidelines lead a user through a series of clinical data collection queries, column 5, lines 7-20; the answers to the queries are "medical statements" based on the patient's examination, see Fig. 14, column 10, lines 30-32, and column 12, lines 3-24), at least some of the plurality of medical statements being associated with a diagnostic predictor (the answers to the queries lead to treatment options, column 5, lines 33-35 and column 12, line 64 to column 13, line 5; the answers, i.e. "medical statements", therefore are "associated" with "diagnostic predictors", in that the answers lead to a diagnosis);

analyzing the diagnostic predictors from the plurality of medical statements (the answers to the queries lead to treatment options, column 5, lines 33-35 and column 12, line 64 to column 13, line 5); and

providing, as an output, a clinical assessment based on the analysis of the diagnostic predictors (see Fig. 16, the recommended treatments derived from the analysis of the provided answers are output to the user, column 13, lines 6-13).

In regard to claim 31, McIlroy et al. disclose the plurality of medical statements are automatically generated (answers to questions automatically bring additional

questions to be answered, therefore the medical statements are “automatically generated”, column 12, lines 25-35).

In regard to claim 32, McIlroy et al. disclose generating a plurality of medical statements from the statement library based on patient history information (guidelines that are used to generate answers include extension reviews which are extensions of a previous examination, column 11, lines 52-67).

In regard to claim 33, McIlroy et al. disclose the clinical measurements include physical examination information (the health care provider collects information from the patient by performing tests, column 10, lines 30-32; see further Fig. 14, physical examination information such as redness, swelling, etc.)

In regard to claim 34, McIlroy et al. disclose the clinical assessment includes a cardiovascular assessment (see Fig. 14, title of the window, the assessment is a cardiovascular assessment).

In regard to claim 35, McIlroy et al. disclose the medical statements include cardiovascular medical statements (see Fig. 14, title of the window, the assessment is a cardiovascular assessment; the answers, i.e. “medical statements” are therefore “cardiovascular medical statements”).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carbonell et al., in view of Official Notice.

In regard to claim 3, Carbonell et al. do not specifically disclose enabling user initiated changes of the font in a fourth plurality of statements from the statement library.

Official notice is taken that it is notoriously well known in the art to allow a user to change the font in a text based system. Doing so ensures that text in a document has a consistent look that is easier to read.

It would have been obvious to one of ordinary skill in the art at the time of invention to enable user initiated changes in font to a fourth plurality of statements (lexical items), because allowing a user to change the font ensures that the text in a document has a consistent look and is easier to read.

In regard to claim 10, Carbonell et al. do not specifically disclose changing font information for a statement (lexical item).

Official notice is taken that it is notoriously well known in the art to allow a user to change the font in a text based system. Doing so ensures that text in a document has a consistent look that is easier to read.

It would have been obvious to one of ordinary skill in the art at the time of invention to change the font information for a statement (lexical item), because allowing a user to change the font ensures that the text in a document has a consistent look and is easier to read.

7. Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carbonell et al., in view of McIlroy et al.

In regard to claim 18, Carbonell et al. disclose a method of generating a report text comprising:

accessing a first statement from a statement library stored in a computer readable database, the first statement being associated with a first grammatical characteristic identifier (Fig. 7, if a non-CSL word is found, an alternative CSL vocabulary word is returned, column 20, lines 33-40; each entry in the CSL vocabulary is associated with a part of speech, column 17, lines 9-14);

accessing a second statement from the statement library, the second statement being associated with a second grammatical identifier (the process is repeated for each term in the unit, column 20, lines 41-47);

assembling the first statement and the second statement into a text block using the grammatical characteristic identifiers associated with the first medical statement and the second medical statement (a grammar checker ensures added CSL vocabulary meet grammatical constraints, column 25, lines 17-34).

While Carbonell et al. disclose the use of statements in general, Carbonell et al. do not specifically disclose the statements are medical statements.

McIlroy et al. disclose a method for generating a report text that uses medical statements (guidelines lead a user through a series of clinical data collection queries, column 5, lines 7-20; the answers to the queries are “medical statements” based on the patient’s examination, see Fig. 14, column 10, lines 30-32, and column 12, lines 3-24).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Carbonell et al. to specifically generate reports using medical statements, because this would provide a cost-effective, real-time, interactive for managing health care, as taught by McIlroy et al. (column 2, lines 31-48).

In regard to claim 19, Carbonell et al. do not disclose associating clinical data with the first medical statement.

McIlroy et al. disclose associating clinical data with a first medical statement (the answers to the queries are “medical statements” based on the patient’s examination, see Fig. 14, column 10, lines 30-32, and column 12, lines 3-24).

It would have been obvious to one of ordinary skill in the art at the time of invention to further modify Carbonell et al. to associate clinical data with a the first medical statement, because clinical data will allow treatment options to be obtained, as taught by McIlroy et al. (column 3, lines 13-17).

In regard to claim 20, Carbonell et al. do not disclose incorporating reason codes into the text block.

McIlroy et al. disclose incorporating reason codes into a text block (column 14, lines 17-25).

It would have been obvious to one of ordinary skill in the art at the time of invention to further modify Carbonell et al. to include reason codes into a text block, in order to indicate a variance between a suggested treatment option and the actual implemented treatment option, as taught by McIlroy et al. (column 14, lines 17-25).

In regard to claim 21, Carbonell et al. disclose associating the first and second statements with a template configured to guide the assemblage of the text block (the vocabulary checker ensures terms are valid CSL items, and thus acts as a “template” for constructing the text, column 20, lines 33-40).

While Carbonell et al. do not disclose statements are specifically medical statements, as established in reference to claim 18, above, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Carbonell et al. to specifically generate reports using medical statements, because this would provide a cost-effective, real-time, interactive for managing health care, as taught by McIlroy et al. (column 2, lines 31-48).

In regard to claim 22, Carbonell et al. disclose constraining selection of the second statement according to a template configured to guide assemblage of the text

block (the terms added to the text are constrained to valid CSL terms, column 20, lines 33-40).

While Carbonell et al. do not disclose statements are specifically medical statements, as established in reference to claim 18, above, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Carbonell et al. to specifically generate reports using medical statements, because this would provide a cost-effective, real-time, interactive for managing health care, as taught by McIlroy et al. (column 2, lines 31-48).

In regard to claim 23, Carbonell et al. disclose constraining the selection of the second statement from a group of statements according to the template (a group of valid CSL synonyms related to a non-CSL term are suggested to the user, column 20, lines 33-40).

While Carbonell et al. do not disclose statements are specifically medical statements, as established in reference to claim 18, above, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Carbonell et al. to specifically generate reports using medical statements, because this would provide a cost-effective, real-time, interactive for managing health care, as taught by McIlroy et al. (column 2, lines 31-48).

In regard to claim 24, Carbonell et al. disclose constraining selection of the second statement according to a third grammatical characteristic associated with a third



statement as specified in the template (the grammar checker ensures each word in an output sentence meets grammatical constraints, column 25, lines 17-34).

While Carbonell et al. do not disclose statements are specifically medical statements, as established in reference to claim 18, above, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Carbonell et al. to specifically generate reports using medical statements, because this would provide a cost-effective, real-time, interactive for managing health care, as taught by McIlroy et al. (column 2, lines 31-48).

In regard to claim 25, Carbonell et al. disclose constraining the selection of the second statement according to an explicit statement list as specified by the template (a group of valid CSL synonyms related to a non-CSL term are listed to the user, column 20, lines 33-40).

While Carbonell et al. do not disclose statements are specifically medical statements, as established in reference to claim 18, above, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Carbonell et al. to specifically generate reports using medical statements, because this would provide a cost-effective, real-time, interactive for managing health care, as taught by McIlroy et al. (column 2, lines 31-48).


**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Albertalli whose telephone number is (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BLA 3/27/06

  
**DAVID HUDSPETH**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**